The amplifier is the heart of any hi-fi system. With the popularity of hi-fi separates steadily increasing, more and more people are turning to integrated amplifiers as an alternative to AV receivers. Integrated amps often sound better when playing back stereo sources such as music, as the money saved by removing features such as surround sound and digital processing is often spent on higher quality components to make your music sound better.

There are hundreds of integrated amps available at all price points, from budget amps for under £100, to amps costing over £20,000! The features found on these amps vary – some feature tone controls while others don’t, some can switch more than 1 pair of speakers, meaning you can have speakers in 2 rooms. All these amps have 1 goal though – to make your music sound great.

The Azur 851A is Cambridge Audio’s flagship amplifier. It’s rated at 120W per channel into an 8 ohm load, and delivers 200W into 4 Ohms. It features Cambridge audio’s proprietary Class XD technology (more on that later), a high end silicon gate volume control, 2 sets of switched speaker outputs, and separate toroidal transformers for the pre/power sections, effectively making it a pre/power combination in 1 box.

## The packaging

The packaging is refreshingly simple – the amp comes in a strong box with 2 thick foam inserts supporting it at either end. The amp itself is wrapped in a cloth bag. A bag containing the documentation, a remote and batteries lies on the top in between the 2 foam ends. Very nicely done.

## Initial setup

The first thing you notice when lifting the 851 out of its box is the weight… this thing really is a monster. It feels considerably heavier than the 15KG stated in the specifications. It’s solidly put together too – the side panels wrap around and it has a thick brushed metal front panel. Tapping the top yields a dull ‘thump’ sound, unlike some other amps where the metal case rings and vibrates. Rounding off the awesome build quality are the sturdy metal volume knob, high quality input/output jacks, and acoustically damped feet which keep the amp firmly in place and do a great job minimizing vibrations.

### The back

The amp features a plethora of connectivity options. The rear panel has 8 inputs, with inputs 1 and 2 giving you the option of unbalanced RCA or balanced XLR connections. Any of these inputs can be set for fixed gain, meaning the 851 can be integrated into a home cinema setup and used to drive the front speakers.

A line level recording output is provided for output to recording devices (such as a cassette deck, cd recorder, minidisc player, computer interface, etc.). This is a recording monitor input - when used in conjunction with a device that allows monitoring while recording (such as a 3 head analog cassette deck), pressing the 8th input button on the front panel will switch to that input and allow you to monitor your recording. Pressing the button again will return you to whichever source you were previously listening to. It’s nice to see a modern amp with this facility.

The amp has an RS-232 port for use in custom installations. An IR input jack is provided as well as RCA remote input and output jacks for linking up to other Cambridge audio equipment.

Preamp outputs are provided for connection to an external power amplifier or subwoofer. 2 sets of speaker outputs (a and b) are provided. You can switch between A, B, or A+B using the button on the front panel or using the Azur remote.

Everything is clearly labeled making connecting a system up easy. The IEC power cable is also detachable which is a nice touch, and makes upgrading the cable possible. Finally, a power switch is provided if you wish to cut power to the amp entirely.

### The front

The front is simple and neatly laid out. The standby, speaker selection and mode controls, as well as the IR sensor and headphone jack, are situated to the left of the central display. To the right of the display are the tone controls, the direct button to bypass the tone controls for purer sound, and the volume control. Running vertically either side of the display are the source buttons – 4 on each side.

It’s nice to see direct access source selection buttons, rather than a click wheel. The 851 also has a very nice volume control – turning it feels smooth, and it glides along as the volume gently rises or falls.

The display is used to show the status of the amp (volume level, source, and protection messages), and provides access to the menus. The amp has several settings that can be adjusted, including a volume ramp function that turns the volume down at standby and gently increases it when the amp is powered on to prevent speaker damage, aspects of the ‘cap5’ protection system can be altered as required, and each of the source inputs can be named to reflect the devices you have connected. I haven’t explored the menus as I have no need to alter the settings, but the Cambridge user manual explains them all in great detail.

## Usage

### The remote

The 851a comes with the Azur navigator remote. It’s a lovely remote, with a thick metal face and nice tactile buttons. It can control other Cambridge audio equipment such as the Azur 851C CD player, and can also control an iOS device when mounted in a compatible Cambridge Audio dock such as the ID100. It’s well laid out, and fits perfectly in the hand when adjusting the volume, skipping tracks, and changing inputs. It takes 3 AAA batteries, which slide in easily making changing them a snap.

### Using the amp

After pressing the standby button, the amp takes roughly 5 seconds to come out of protection mode. Once it’s up and running, playing music is a simple matter of pressing the desired input button, starting the source and turning up the volume.

Input switching is performed by high quality relays. This stops inputs bleeding into one another as each input is completely isolated. It also makes a very satisfying metallic “clunk” when switching inputs.

The tone controls pop out when pressed to allow adjustment, and can then be pressed back in – this is a nice touch. The amp also remembers whether the tone controls were enabled for each input. The tone controls are subtle and work well - however, I leave them off for the majority of my listening.

## The sound

Now for the part you’ve all been waiting for… how does it sound? In short… stunning. Amazing. Phenomenal.

Whatever the source, whatever the soundtrack, the Cambridge 851a effortlessly reproduces every detail of the music. It’s a very natural sounding amp, with a touch of warmth and emotion. Play ‘misguided ghosts’ from paramore’s brand new eyes album, and the Cambridge delivers Hayley William’s soft, gentle vocal with ease. There’s a real 3d depth to the sound stage allowing you to almost hear the reverberation of Josh and Taylor’s guitars bouncing off the walls in the studio. It’s beautiful to behold.

Spin the title track from queen’s ‘innuendo’ album, and the Cambridge starts to rock. Instruments are positioned perfectly within the soundstage, and there’s an endless supply of power driving the low end bass notes, not to mention roger Taylor’s powerful drum hits into your chest. The acoustic guitars have just the write amount of zing and subtle details are easy to pick out. The 851 also beautifully renders the panned harmonies, accurately positioning the multi-tracked voices of the 4 queen members within the sound stage allowing you to hear every note.

Next to some evanescence – play ‘my immortal’ or ‘hello’ from the fallen album, and the Cambridge accurately conveys all the emotion in Amy lee’s vocal. The delivery is effortless.

Performance with headphones is equally good – plug in a pair of sennheiser HD 598’s and spin shinedown’s ‘somewhere in the stratosphere’, and the amp transports you to kansas city and puts you right in the middle of the audience. The sound is spacious and open. It has just the right amount of attack to keep you on the edge of your seat, but doesn’t miss out any of the subtle details - you hear every scream from the surrounding audience.

While we’re on the subject of sound, let’s talk about class XD. Not to be confused with class D, class XD is a propriety Cambridge Audio technology designed to combine the sonic benefits of pure class a operation with the efficiency of class B operation. You can read more about how the technology works on the Cambridge Audio website – essentially, the technology is designed to displace the distortion caused when the fragile audio signal is passed from transistor to transistor. This results in a very clean sound – I couldn’t detect any audible distortion when using the 851a, even at very high volume levels.

Due to the nature of the class XD technology, the amp does run slightly warmer than a typical class AB amplifier – quite a bit warmer in fact. It is important that the amp be placed on an open rack with plenty of airflow and with no components stacked on top.

## Summary

In summary… The Cambridge audio Azur 851a is as close as it gets to the perfect amplifier. A huge number of connectivity options make it flexible enough to integrate into any stereo/AV setup, and the sound will put a smile on the face of even the most discerning audiophile. Pair it with some decent speakers and you’ll have an incredible system with build quality that will last for years to come.

If I was to change anything, I’d add a second (or even third) line level recording output, and maybe add an option to shut down the amplifiers to save power if all you need is the preamp (for example when recording from a vinyl into the computer). Other than that, it’s perfect. Arrange a demo at your nearest dealer and take your musical enjoyment to a whole new level.

Read more:

<http://www.cambridgeaudio.com/products/azur-851a-integrated-class-xd-amplifier>